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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/282,860	03/31/1999	JONATHAN P. BREZIN	YO999-121	9207
7	590 07/30/2003			
IBM CORPORATION			EXAMINER	
INTELLECTUAL PROPERTY LAW DEPT PO BOX 218			FLEURANTIN, JEAN B	
YORKTOWN HEIGHTS, NY 10598			ART UNIT	PAPER NUMBER
			2172	l:L
			DATE MAILED: 07/30/2003	10

Please find below and/or attached an Office communication concerning this application or proceeding.

		1/1/					
	Application No.	Applicant(s)					
•	09/282,860	BREZIN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Jean B Fleurantin	2172					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed rs will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on 20 A	<u>//ay 2003</u> .						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th	is action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
4) Claim(s) <u>1-32 and 34-41</u> is/are pending in the	application						
4a) Of the above claim(s) is/are withdraw	• •						
5) Claim(s) is/are allowed.	WIT ITOTTI CONSIDERALION.						
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6)⊠ Claim(s) <u>1-6,11,23,24,26-31 and 37-41</u> is/are rejected.  7)⊠ Claim(s) 7-10,12-22,25,32 and 34-36 is/are objected to.							
7)⊠ Claim(s) <u>7-10,12-22,25,32 and 34-36</u> is/are objected to. 8)□ Claim(s) are subject to restriction and/or election requirement.							
Application Papers	r election requirement.						
9)☐ The specification is objected to by the Examine	r.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Ex	aminer.						
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents	s have been received in Applicati	on No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language pro	• •						
Attachment(s)	, , ,						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal I	y (PTO-413) Paper No(s) Patent Application (PTO-152)					

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#### **DETAILED ACTION**

1. Claims 1-32 and 34-41 are remained pending for examination.

#### Remarks

2. In view of the Appeal Brief filed on May 20, 2003, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
  - (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

## Claim Rejections - 35 U.S.C. § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1-6, 11, 23-24, 26-31 and 37-41 are rejected under 35 U.S. C. 103 (a) as being unpatentable over U.S. Patent No. 6,411,922 issued to Clark et al. in view of U.S. Patent No. 6,571,243 issued to Gupta et a. ("Clark"), ("Gupta").

As per claims 1 and 40, Clark teaches a method to optimize information retrieval based on communication relationships, as claimed, comprises the steps of automatically building and storing a relationship data structure to represent the relationship information (thus, examining a user information resource for database objects and object relationships relevant to solving the optimization problem, transforming the database objects and object relationships into optimization metrics readable by a solver program, and storing the optimization metrics in a solver database accessible by the solver program; which is readable as automatically building and storing a relationship data structure to represent the relationship information)(see col. 3, lines 10-16);

automatically modifying an information retrieval query based on the relationship data structure (thus, information extractor and relationship editor module 224 presents an interface to the application developer for entering information about the specific relationships to be used in extracting data from information resource 222, the application developer provides information to information extractor and relationship editor 224 about the objects in information resource 222, such as the specific object data to extract from information resource 222; which is readable as which is readable as automatically modifying an information retrieval query based on the relationship data structure)(see col. 6, lines 23-26). But, Clark does not explicitly indicate integrating relationship information from multiple heterogeneous information sources. However, Gupta implicitly indicates automated extraction of information from a plurality of semistructured

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information sources, (see col. 4, lines 32-33). Further, in column 3, lines 63-66, Gupta teaches a system for automated extraction of information from a plurality of semistructured information sources useful for incorporating the tuples into a relational database. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Clark and Gupta with integrating relationship information from multiple heterogeneous information sources. This modification would allow the teachings of Clark and Gupta to improve the accuracy and reliability of the optimization of system performance based on communication relationship, and provide a system for automated extraction of information from a plurality of semistructured information sources, (col. 17, lines 14-16).

As per claim 2, Clark teaches a method as claimed, wherein said step of modifying a query comprises the steps of prioritizing and filtering the retrieval of related (thus, a generic problem modeler which can examine an existing user information resource and transform the relevant information from the resource into data that can be stored in a solver database which is directly accessible by a problem solver; which is readable as wherein said step of modifying a query comprises the steps of prioritizing and filtering the retrieval of related)(see col. 3, lines 41-45).

As per claims 3 and 4, the limitations of claims 3 and 4 are rejected in the analysis of claim 1, and these claims are rejected on that basis.

As per claim 5, Clark teaches a method as claimed, wherein the heterogeneous information sources are selected from the group consisting of one or more of: people-managed data sources; organization charts; mailing lists; calendar entries; personal address books; priority lists of contacts; and automated system log type information including phone logs and e-mail

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logs (thus, applications for optimization include telecommunications network optimization, supply chain optimization, logistics resource allocation in airports and ports, manpower scheduling, maintenance scheduling, production planning, vehicle dispatching, and technician dispatching; which is readable as wherein the heterogeneous information sources are selected from the group consisting of one or more of: people-managed data sources; organization charts; mailing lists; calendar entries; personal address books; priority lists of contacts; and automated system log type information including phone logs and e-mail logs)(see col. 1, lines 31-36).

As per claims 6, 23, 26 and 30, Clark the claimed subject matter except the claimed assigning different preferences to the heterogeneous information sources. However, Gupta implicitly indicates automated extraction of information from a plurality of semistructured information sources, (see col. 4, lines 32-33). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Clark and Gupta with assigning different preferences to the heterogeneous information sources. This modification would allow the teachings of Clark and Gupta to improve the accuracy and reliability of the optimization of system performance based on communication relationship, and provide a system for automated extraction of information from a plurality of semistructured information sources, (col. 17, lines 14-16).

As per claim 11, Clark teaches a method as claimed, further comprises the step of assigning a weight to each information source based on a preference, (see col. 6, lines 40-50);

computing the aggregate communication intensity, based on the weight and the preference, (see col. 6, lines 47-50).

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As per claim 24, Clark teaches a method as claimed, further comprises the step of recommending a communication channel based on a recipient characteristic, (see col. 3, lines 8-23).

As per claims 27, 28 and 29, Clark teaches a method as claimed, further comprises the step of detecting changes in the relationship information maintained (thus, the optimization metrics stored in the solver database are updated in real-time in response to changes in the data objects and the object relationships in the user information source; which is readable as detecting changes in the relationship information maintained)(see col. 3, lines 36-39).

As per claim 31, Clark teaches a method as claimed, further comprises the step of labeling each link with a communication intensity vector, where each dimension of the communication intensity vector represents a communication intensity from an information source (thus, the format of the metrics is flexible and could be scalars function including functions of other metrics; which is readable as where each dimension of the communication intensity vector represents a communication intensity from an information source)(see col. 6, lines 54-56).

As per claims 37 and 38, Clark teaches a method as claimed, further comprises the step of modifying the query to create one or more sub-queries, (see col. 10, lines 49-53).

As per claim 39, Clark teaches a method as claimed, further comprises the step of excluding results from the sub-queries, (see col. 10, lines 49-53).

As per claim 41, Clark teaches a method as claimed, further comprises the step of prioritizing and filtering a list of name to e-mail address mapping to facilitate sending e-mail (thus, a generic problem modeler which can examine an existing user information resource and

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transform the relevant information from the resource into data that can be stored in a solver database which is directly accessible by a problem solver; which is readable as prioritizing and filtering a list of name to e-mail address mapping to facilitate sending e-mail)(see col. 3, lines 41-45).

# Claim Objections

4. Claims 7-10, 12-22, 25, 32 and 34-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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### **Contact Information**

5. Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mrs. KIM VU can be reached at (703) 305-8449. The FAX phone numbers for the Group 2100 Customer Service Center are: *After Final* (703) 746-7238, *Official* (703) 746-7239, and *Non-Official* (703) 746-7240. NOTE: Documents transmitted by facsimile will be entered as official documents on the file wrapper unless clearly marked "*DRAFT*".

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2100 Customer Service Center receptionist whose telephone numbers are (703) 306-5631, (703) 306-5632, (703) 306-5633.

Jean Bolte Fleurantin

July 25, 2003

JBF/